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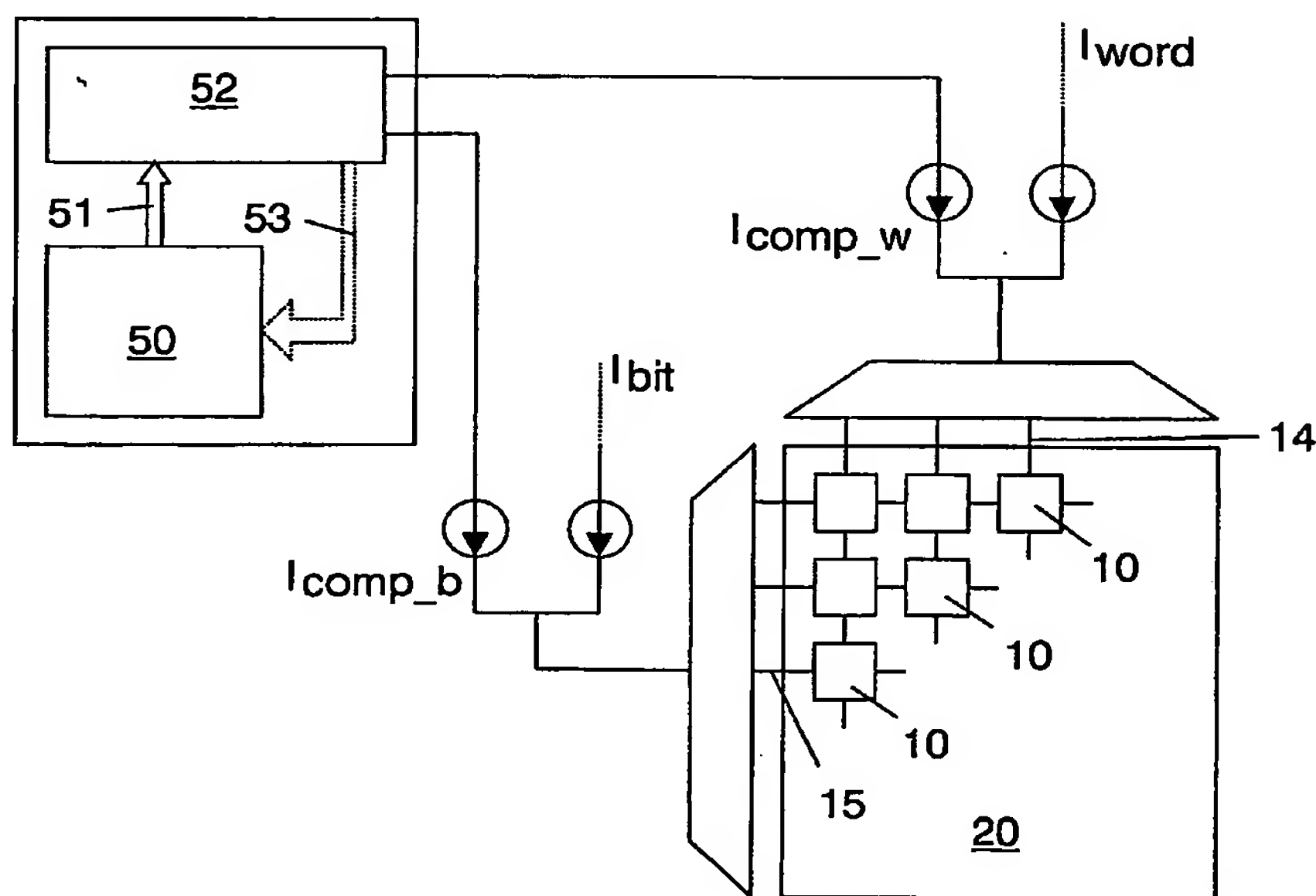
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(54) Title: **METHOD AND DEVICE FOR PERFORMING ACTIVE FIELD COMPENSATION DURING PROGRAMMING OF A MAGNETORESISTIVE MEMORY DEVICE**



(57) Abstract: The present invention provides an array (20) of magnetoresistive memory elements (10). The array (20) comprises: means for applying a current or voltage for generating a programming magnetic field at a selected magnetoresistive memory element (10s), a magnetic field sensor unit (50) for measuring an external magnetic field in the vicinity of the selected magnetoresistive memory element (10s), and means (52) for tuning the current or voltage for compensating locally for the measured external magnetic field during a programming operation. The present invention also provides a corresponding method.

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